**Geometry Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Trig Project Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pr: \_\_\_\_\_**

Today, we are going outside to find inspiration for our next step.

While out in the city, measure the height of building using sine, cosine, tangent, and your clinometer.

Draw a picture to help show how you used trigonometry to solve the problem that you did.

Remember:

|  |  |
| --- | --- |
| Your clinometer should look like this. | Your diagram should look something like this. |

Find:

Angle of elevation on your clinometer

Distance between you and the building

Distance of eye level to the ground

Bring this outside to help you measure the building! Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On-time

1. Find the angle of elevation using your clinometer. Record this angle measure below:

2. Find the distance between you and the building. Record this distance below (include units):

3. Find the distance from your eye level to the ground (include units):

Bring this outside to help you measure the building! Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On-time

1. Find the angle of elevation using your clinometer. Record this angle measure below:

2. Find the distance between you and the building. Record this distance below (include units):

3. Find the distance from your eye level to the ground (include units):

Bring this outside to help you measure the building! Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On-time

1. Find the angle of elevation using your clinometer. Record this angle measure below:

2. Find the distance between you and the building. Record this distance below (include units):

3. Find the distance from your eye level to the ground (include units):

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Clinometer Worksheet with a Chicago Building (YOU WILL NEED TO TURN THIS IN!)**

* Show **calculations** (trigonometric functions) and work in the space provided below.
* **Drawing** should include the following:
  + Angle of elevation
  + Distance from you to the building
  + Unknown length (using trig functions)
  + Distance of eye level to the ground
  + Height of the building

|  |
| --- |
|  |